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Comment Text :

--> EIS OFFICE,

U.S. Department of Energy,

Office of Civilian Radioactive Waste Management,

1551 Hillshire Drive, Las Vegas, NV 89134

To Whom it May Concern,

On behalf of Physicians for Social Responsibility (PSR), I write to submit the following public comment in respect to the Department of Energy's (DOE) Supplemental Yucca Mountain Repository, Nevada Rail Corridor and Draft Rail

Alignment Environmental Impact Statements. Physicians for Social Responsibility have grave concerns with Yucca Mountain,

since disposing of nuclear waste in a deep repository in Nevada threatens human life and health throughout the United States. Before going into the threat that such a repository poses to the United States, it is important to emphasis how rot with problems this policy has been since its inception. For one, the repository is limited, according to the Nuclear Waste Policy Act of 1982, to accept no more than 63,000 tons of nuclear waste until a second repository is in operation. Even with a change in law to allow for more nuclear waste to be stored at Yucca, Yucca would reach its full capacity by 2015, since the United States commercially generates 2,000 tons of spent fuel (nuclear waste) a year. Furthermore, the licensing process for Yucca

Mountain is disputed over issues concerning environmental standards and opposition by the state of Nevada. For instance, last year, a district court ruling found the Environmental Protection Agency's 10,000-year safety standard on radiation containment at Yucca inconsistent with congressionally mandated National Academy of Sciences recommendations. Plus, in surveys done by the State of Nevada, 75% of the population is opposed to locating a high-level nuclear waste repository at Yucca Mountain.

Physicians for Social Responsibility is extremely concerned with the grave danger that the Yucca Mountain repository plan poses to human life and health in the United States. For example, look at the transportation plan for this radioactive waste. If the current stock of commercially generated nuclear waste is shipped by truck to a repository like Yucca Mountain, one shipment every four hours, 24-hours a day for 38 years would cross the United States through 43 states. DOE prepared a Draft Supplemental Environmental Impact Statement for Yucca Mountain in October 2007. In the Statement, DOE estimates that, if there were no major accidents, 5 people (one member of the public and four transportation workers) would die of cancer from the transport of this radioactive waste within 50 years. However, DOE assures us that, "this number of fatalities, which would occur over as many as 50 years, would not be discernable from the 600,000 people who die from cancer every year in the United States."

I assure you that every lost life is discernable and matters. A policy that allows for loss of life is not ethical DOE also estimated that 5 to 6 people would die from truck and rail accidents within 50 years of transporting waste to Yucca. However, if there was an "incident," like a severe transportation accident in an urban area, DOE reports that it "would result in an estimated 9 cancer fatalities." However, the State of Nevada estimated that a rail accident of this type in an urban area would actually result in 13 to 40,868 latent cancer fatalities in the exposed population. DOE's estimates were also drastically different in comparison to Nevada's when estimating the amount of casualties and injuries that would result if a truck or rail shipment was sabotaged by a terrorist with a High Energy Density Device (an object that would penetrate waste containers). DOE estimated in its Draft Environmental Impact Statement that such an attack on a truck shipment in an urban area would expose 47,000 people to radiation from the accident, killing an estimated 28 people, and a train accident would result in 32,000 exposed and 19 dead. Nevada's estimates for such an attack on either a truck or train prove that ten times that amount would be exposed to radiation and killed. Nevada's estimates of consequences were made using computer programs that DOE

developed and uses. Physicians for Social Responsibility would like to bring to the attention of DOE, and to the public, that recent research on the effects of ionizing radiation prove that very small doses of radiation from the transport of this waste could lead to fatal cancers that once were thought to result only from high level doses of radiation. Ionizing radiation in high-level doses (exposure to over 1 Sievert) produce immediate damage like skin burns, hair loss, and bone marrow destruction. Low doses (exposures under .1 Sievert or 40 times the average yearly background exposure) are less predictable, the effects are not immediately visible, and involve the cancerous transformation of cells. Seven reports since 1956 have been published by the National Research Council's Committee on Biological Effects of Ionizing Radiation (BEIR). The reports address the potential health effects from exposure to low doses of radiation. Since 1990, the committee has supported the "linear no-threshold model" hypothesis. This hypothesis states that all exposure to radiation, no matter how small the dose; presents some risk to human health. The most recent committee report (BEIR VII) calculated the expected cancer risk from a singular exposure of 0.1 Sievert. The committee found that in a lifetime approximately 42 out of 100 people will be diagnosed with cancer and one cancer out of these 100 people could result from a single exposure to 0.1 Sievert of low-level radiation above background. There is still a lack of

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scientific certainty over what level of radiation exposure leads to cancer, mostly due to the difficulty in proving a casual link between a specific radiation exposure and adverse health effects, however the likely risk is sufficient reason to prevent the Yucca Mountain policy from moving forward, since it will likely expose workers and hundreds of U.S. communities to low-levels of radiation.

Thank you for your time in seriously considering these concerns and comments Sincerely,

Michael McCally, M.D., Ph.D. Executive Director, Physicians for Social Responsibility